

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,915	07/28/2003	Koichi Yoshimura	116673	3625
25944 75	90 11/15/2006		EXAMINER	
OLIFF & BERRIDGE, PLC			· PHAM, MICHAEL	
P.O. BOX 1992 ALEXANDRIA			ART UNIT	PAPER NUMBER
	•		2167	
			DATE MAIL ED: 11/15/2006	4

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
		10/627,915	YOSHIMURA ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Michael D. Pham	2167				
Period fo	The MAILING DATE of this communica or Reply	tion appears on the cover shee	with the correspondence address				
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAIL nsions of time may be available under the provisions of 3 SIX (6) MONTHS from the mailing date of this community operiod for reply is specified above, the maximum statutor to reply within the set or extended period for reply will, reply received by the Office later than three months after ed patent term adjustment. See 37 CFR 1.704(b).	LING DATE OF THIS COMMU 7 CFR 1.136(a). In no event, however, ma cation. bry period will apply and will expire SIX (6) If by statute, cause the application to becom	NICATION. y a reply be timely filed MONTHS from the mailing date of this communication. e ABANDONED (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed of	on 06 September 2006.					
		☐ This action is non-final.					
3)	Since this application is in condition for		atters, prosecution as to the merits is				
	closed in accordance with the practice	under <i>Ex parte Quayle</i> , 1935 (	D.D. 11, 453 O.G. 213.				
Disposit	ion of Claims						
4)⊠	I)⊠ Claim(s) <u>1-21</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	Claim(s) is/are allowed.						
6)⊠	Claim(s) <u>1-21</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)	Claim(s) are subject to restriction	n and/or election requirement.					
Applicat	ion Papers						
9)[	The specification is objected to by the E	xaminer.					
10)[	The drawing(s) filed on is/are: a	) accepted or b) dobjected	to by the Examiner.				
	Applicant may not request that any objection	n to the drawing(s) be held in abe	yance. See 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the	e correction is required if the draw	ing(s) is objected to. See 37 CFR 1.121(d).				
11)	The oath or declaration is objected to by	the Examiner. Note the attac	ned Office Action or form PTO-152.				
Priority (	under 35 U.S.C. § 119						
	Acknowledgment is made of a claim for  ☐ All b) ☐ Some * c) ☐ None of:	foreign priority under 35 U.S.C	). § 119(a)-(d) or (f).				
	1. Certified copies of the priority do	cuments have been received.					
	2. Certified copies of the priority do	cuments have been received i	n Application No				
	3. Copies of the certified copies of t	the priority documents have be	en received in this National Stage				
	application from the International	, , , , , , , , , , , , , , , , , , , ,					
* (	See the attached detailed Office action for	or a list of the certified copies i	not received.				
Attachmen	t(s)						
1) 🔯 Notic	e of References Cited (PTO-892)		ew Summary (PTO-413)				
	e of Draftsperson's Patent Drawing Review (PTO mation Disclosure Statement(s) (PTO/SB/08)		No(s)/Mail Date of Informal Patent Application				
	r No(s)/Mail Date	6) Other:					

# **Detailed Action**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/6/06 has been entered.

# Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-7 and 16-21 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5761496 by Hattori (hereafter Hattori) further in view of U.S. Patent Application Publication 2003/0204497 by Kalogeraki et. al. (hereafter Kalogeraki).

## Claim 1:

#### Hattori discloses:

A retrieval result judgment unit that judges whether or not a result of the first retrieval satisfies judgment criteria set in advance [c. 7 l. 28-30, if temporary retrieval result

obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by the user, the system modifies retrieval parameters, generates a new retrieval expression]; and

A retrieval result output unit that outputs the result which is judged to satisfy the judgment criteria [c. 10 l. 53-55, retrieval result output section outputs final retrieval results.];

Wherein when it is judged that the result of the first retrieval does not satisfy the judgment criteria, the retrieval unit changes the retrieval condition and performs a second retrieval over the network [c. 7 lines 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by user the system modifies retrieval parameters, generates a new retrieval expression. Col. 14 l. 32-40, network];

A retrieval unit that sets a retrieval condition according to a request and performs a first retrieval over the network based upon the set retrieval condition (retrieval condition) [figure 1, retrieval management section. Retrieval expression from input keywords which are entered as retrieval request and relational keywords based on background knowledge, and based on this retrieval expression, execute the retrieval. Retrieval result condition previously setup checks if the retrieval expression meets the retrieval result condition. Col. 14 l. 32-40, network]

However Hattori does not explicitly disclose a service.

On the other hand, Kalogeraki, abstract, discloses a service search network system.

Both Hattori and Kalogeraki are directed to a system for searching and receiving. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hattori to have included a service based on the disclosure of Kalogeraki for the purpose of providing more relevant search results. Kalogeraki improves upon Hattori by providing another search result including relevant services.

#### Claim 2:

Hattori as modified with Kalogeraki discloses

The service retrieval apparatus according to claim 1, wherein when it is judged that a number of one or more services (Kalogeraki, abstract, services) included in the retrieval result has not reached a lower limit number (minimum retrieval count) set as the judgment criteria, the retrieval unit changes the retrieval condition (condition) so as to be wider and performs the second retrieval [Hattori, c. 23 l. 25-39, if the estimated number of retrieval count does not fall between the specific minimum retrieval (lower limit) count and the specified maximum retrieval count (upper limit) the retrieval expression is modified repeatedly until the condition is satisfied.].

## Claim 3:

The service retrieval apparatus according to claim 2, wherein the retrieval unit performs the second retrieval with respect to a new retrieval range excluding a range for which the first retrieval is performed [Hattori, c. 23 1. 30-39, retrieval parameter k indicates how restrictive the retrieval condition is. As the value of retrieval k becomes closer to 1, the

Application/Control Number: 10/627,915

Art Unit: 2167

Page 5

retrieval condition becomes more restrictive and the number of data items retrieved from database decreases. Conversely, as the value of the retrieval parameter k becomes closer to 0 the retrieval condition becomes less restrictive and the number of data items increases. ].

# Claim 4:

The service retrieval apparatus according to claim 1, wherein, when it is judged that a number of one or more services included in the result of the first retrieval exceeds an upper limit number set as the judgment criteria, the retrieval unit changes the retrieval condition to be narrower to perform the second retrieval [Hattori, c. 23 l. 25-39, if the estimated number of retrieval count does not fall between the specific minimum retrieval (lower limit) count and the specified maximum retrieval count (upper limit) the retrieval expression is modified repeatedly until the condition is satisfied.].

#### Claim 5:

The service retrieval apparatus according to claim 4, wherein the retrieval unit performs the second retrieval with respect to a new retrieval range excluding a range for which the first retrieval is performed [Hattori, c. 23 l. 30-39, retrieval parameter k indicates how restrictive the retrieval condition is. As the value of retrieval k becomes closer to 1, the retrieval condition becomes more restrictive and the number of data items retrieved from database decreases. Conversely, as the value of the retrieval parameter k becomes closer to 0 the retrieval condition becomes less restrictive and the number of data items increases. ]..

## Claim 6:

The service retrieval apparatus according to claim 4, wherein the retrieval unit narrows down a range for which the first retrieval is performed for performing the second

retrieval [Hattori, c. 23 l. 25-39, if the estimated number of retrieval count does not fall between the specific minimum retrieval (lower limit) count and the specified maximum retrieval count (upper limit) the retrieval expression is modified repeatedly until the condition is satisfied.].

# Claim 16:

#### Hattori discloses:

Judging whether or not a result of the first retrieval satisfies judgment criteria set in advance [c. 7 l. 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by the user, the system modifies retrieval parameters, generates a new retrieval expression]; and

Returning the result of the retrieval which is judged to satisfy the judgment criteria [c. 101.53-55, retrieval result output section outputs final retrieval results.];

When it is judged that the result of the retrieval does not satisfy the judgment criteria, changing the retrieval condition to perform a second retrieval over the network [c. 7 lines 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by user the system modifies retrieval parameters, generates a new retrieval expression. Col. 14 1. 32-40, over a network];

setting a retrieval condition in response to a request of the client and performing a first retrieval over the network based upon the retrieval condition (retrieval condition)

[figure 1, retrieval management section. Retrieval expression from input keywords which are entered as retrieval request and relational keywords based on background knowledge, and based

t: 2167

on this retrieval expression, execute the retrieval. Retrieval result condition previously setup checks if the retrieval expression meets the retrieval result condition.].

However, Hattori does not explicitly disclose a service.

On the other hand, Kalogeraki, abstract, discloses a service search network system.

Both Hattori and Kalogeraki are directed to a system for searching and receiving. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hattori to have included a service based on the disclosure of Kalogeraki for the purpose of providing more relevant search results. Kalogeraki improves upon Hattori by providing another search result including relevant services.

### **Claim 17:**

The service retrieval method according to claim 16 further comprising:

When it is judged that a number of one or more services included in the result of the retrieval does not reach a lower limit number set as the judgment criteria, changing the retrieval condition to be wider to perform the second retrieval again [Hattori, c. 23 1. 25-39, if the estimated number of retrieval count does not fall between the specific minimum retrieval (lower limit) count and the specified maximum retrieval count (upper limit) the retrieval expression is modified repeatedly until the condition is satisfied.].

Application/Control Number: 10/627,915

Art Unit: 2167

Claim 18:

The service retrieval method according to claim 17, wherein the second retrieval is

performed with respect to a new retrieval range excluding a range for which the first

retrieval is performed [Hattori, c. 23 l. 30-39, retrieval parameter k indicates how restrictive the

Page 8

retrieval condition is. As the value of retrieval k becomes closer to 1, the retrieval condition

becomes more restrictive and the number of data items retrieved from database decreases.

Conversely, as the value of the retrieval parameter k becomes closer to 0 the retrieval condition

becomes less restrictive and the number of data items increases. ].

Claim 19:

The service retrieval method according to claim 16 further comprising:

When it is judged that a number of one or more services included in the result of the

first retrieval exceeds an upper limit number set as the judgment criteria, changing the

retrieval condition to be narrower to perform the second retrieval [Hattori, c. 23 l. 25-39, if]

the estimated number of retrieval count does not fall between the specific minimum retrieval

(lower limit) count and the specified maximum retrieval count (upper limit) the retrieval

expression is modified repeatedly until the condition is satisfied.].

Claim 20:

The service retrieval method according to claim 19, wherein a range for which the first

interval is performed is narrowed down to perform the second retrieval [Hattori, c. 23 l. 25-

Application/Control Number: 10/627,915 Page 9

Art Unit: 2167

39, if the estimated number of retrieval count does not fall between the specific minimum retrieval (lower limit) count and the specified maximum retrieval count (upper limit) the retrieval expression is modified repeatedly until the condition is satisfied.].

4. Claims 7, 15, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5761496 by Hattori (hereafter Hattori) further in view of U.S. Patent Application Publication 2003/0204497 by Kalogeraki et. al. (hereafter Kalogeraki) and U.S. Patent 6026388 by Liddy et. al. (hereafter Liddy).

#### Claim 7:

Hattori and Kagogeraki disclose in Hattori retrieval based upon values with respect to attribute items included in the retrieval condition (Hattori, c. 11 1.39-61), retrieval request has a retrieval request consisting of an attribute, the value of the attribute, and it's importance degree and returning the result of the retrieval to client (Hattori, retrieval result output, col. 10 lines 53-55); however Hattori and Kagogeraki do not explicitly disclose a reply unit that rearranges the result of the retrieval. On the other hand, Liddy discloses matching of documents to a query organizes documents by matching scores in a ranked list. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hattori and Kagogeraki to have included the step of a reply unit that rearranges the result of the retrieval based on the disclosure of Liddy. One of ordinary skill in the art at the time the invention was made would have been motivated to do so for the purpose of displaying the most relevant results first.

Application/Control Number: 10/627,915

Art Unit: 2167

**Claim 15:** 

A client apparatus which retrieves a service over a network provided by a server connected to the

Page 10

network in response to a service retrieval request and sends the service retrieval request to a

service retrieval apparatus providing a retrieval service for returning a result of the retrieval,

comprising:

Hattori discloses,

Selection means for selecting one or more attribute items, magnitudes (importance degree)

of which can be compared, from attribute items included in retrieval conditions of the

service [Hattori discloses retrieval based upon values with respect to attribute items included in

the retrieval condition (Hattori, c. 11 1.39-61), retrieval request has a retrieval request consisting

of an attribute, the value of the attribute, and it's importance degree; and returning the result of

the retrieval to client (Hattori, retrieval result output, col. 10 lines 53-55)

];

retrieval result receiving means for receiving a retrieval result from a retrieval apparatus

in response to a retrieval request [Hattori, c. 10 l. 53-55, retrieval result output section outputs

final retrieval results.]

However Hattori does not explicitly disclose a service. On the other hand, Kalogeraki, abstract,

discloses a service search network system.

Both Hattori and Kalogeraki are directed to a system for searching and receiving. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hattori to have included a service based on the disclosure of Kalogeraki for the purpose of providing more relevant search results. Kalogeraki improves upon Hattori by providing another search result including relevant services.

Hattori and Kagogeraki do not explicitly disclose output means for rearranging a plurality of items of service information included in the retrieval result based upon values of the attribute items selected by said selection means included in each item of service information to output the service information. On the other hand, Liddy discloses matching of documents to a query organizes documents by matching scores in a ranked list. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hattori and Kagogeraki to have included the step of a reply unit that rearranges the result of the retrieval based on the disclosure of Liddy. One of ordinary skill in the art at the time the invention was made would have been motivated to do so for the purpose of displaying the most relevant results first.

#### Claim 21:

Hattori and Kagogeraki disclose in Hattori retrieval based upon values with respect to attribute items included in the retrieval condition (Hattori, c. 11 1.39-61), retrieval request has a retrieval request consisting of an attribute, the value of the attribute, and it's importance degree and returning the result of the retrieval to client (Hattori, retrieval result output, col. 10 lines 53-55);

however Hattori and Kagogeraki do not explicitly disclose a reply unit that rearranges the result of the retrieval. On the other hand, Liddy discloses matching of documents to a query organizes documents by matching scores in a ranked list. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hattori and Kagogeraki to have included the step of a reply unit that rearranges the result of the retrieval based on the disclosure of Liddy. One of ordinary skill in the art at the time the invention was made would have been motivated to do so for the purpose of displaying the most relevant results first.

5. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5761496 by Hattori (hereafter Hattori) further in view of U.S. Patent Application Publication 2003/0204497 by Kalogeraki et. al. (hereafter Kalogeraki), and Background of the Application (hereafter background).

#### Claim 8:

A plurality of service retrieval apparatuses which provide a retrieval service for retrieving a service provided by a server connected to a network in response to a request from a client and returning a result of the retrieval, the system comprising:

## Hattori discloses:

A retrieval unit that executes a first retrieval over the network for a service according to the set retrieval range (minimum and maximum) for the request [figure 1,

retrieval management section. Retrieval expression from input keywords, which are entered as retrieval request and relational keywords based on background knowledge, and based on this retrieval expression, execute the retrieval. Retrieval result condition previously setup checks if the retrieval expression meets the retrieval result condition. And c. 22 l. 60-65 and c. 23 l. 25-39, user is able to set a minimum and maximum data count, retrieval expression may be modified. Col. 14 l. 32-40, network];

A retrieval result judgment unit that judges whether or not a result of the first retrieval satisfies judgment criteria set in advance[c. 7 1. 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by the user, the system modifies retrieval parameters, generates a new retrieval expression.]; and

A retrieval result output unit that outputs the result which is judged to satisfy the judgment criteria[c. 10 l. 53-55, retrieval result output section outputs final retrieval results.];

Wherein, when it is judged that the result of the retrieval does not satisfy the judgment criteria, the retrieval unit changes the retrieval conditions and performs a second retrieval[c. 7 lines 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by user the system modifies retrieval parameters, generates a new retrieval expression].

However Hattori does not explicitly disclose a service.

On the other hand, Kalogeraki discloses, abstract, a service search network system.

Application/Control Number: 10/627,915 Page 14

Art Unit: 2167

Both Hattori and Kalogeraki are directed to a system for searching and receiving. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hattori to have included a service based on the disclosure of Kalogeraki for the purpose of providing more relevant search results. Kalogeraki improves upon Hattori by providing another search result including relevant services.

Hattori and Kalogeraki disclose a service information database (service repositories) that stores service information including address information (service network address) and installation position information of the server (how the service can be contacted) and attribute information of a service provided by the server (meta-data) [Kalogeraki, 0035, service repositories. 0037, the metadata must include such information as what interactions the service is capable of and how the service can be contacted]:

The modification of Hattori and Kalogeraki disclose a network system (figure 2 element 20). However, Hattori and Kalogeraki do not explicitly disclose sub-network<sup>1</sup>. On the other hand, the background discloses sub-networks. On the other hand, the background discloses page 1, sub-networks.

It would have been obvious to have modified Hattori and Kalogeraki to have included subnetworks, based on the disclosure of the background. One of ordinary skill at the time the

<sup>&</sup>lt;sup>1</sup> Subnetworks are obvious when dealing with internet. One of ordinary skill in the art would know that the Internet comprises connected computer networks, which fits the definition of a sub-network (e.g. a network that is part of another larger network).

invention was made would have been motivated to provide a sub-network for the purpose of providing a more information from different systems in retrieval systems.

Page 15

The modification of Hattori, Kalogeraki, and the background discloses

A service retrieval apparatus database (Kalogeraki, 0035, service repository) that, when the network is divided into a plurality of sub-networks (background, 0004 sub-network), stores address information and installation position information of a service retrieval apparatus with each sub-network (Kalogeraki, 0035, stores descriptive information) included in a retrieval range (background, pg. 41. 11-20, retrieval range);

A retrieval range setting unit that (background, pg. 41. 11-20, set retrieval range), by retrieving the service retrieval apparatus database (background 41. 11-20, service retrieval using a range to be a target of retrieval in the network is set, disclosed service information is retrieved in the set retrieval range.) based upon inputted retrieval conditions specifies one or more service retrieval apparatuses conforming to the retrieval conditions (Kalogeraki, abstract, formats the service search request into a format recognized by the file search nodes such that the service request can be propagated to the second service search node via some of the file search nodes.) and sets sub-networks (background, 0004, sub-networks), which correspond to the specified service retrieval apparatuses, as a retrieval range for the request (background pg. 41. 11-20, set retrieval range).

# Claim 9:

The service retrieval apparatuses according to claim 8, wherein when it is judged that a number of one or more services (Kalogeraki, abstract, services) included in the retrieval result of the retrieval does not reach a lower limit number set as the judgment criteria, the retrieval unit changes the retrieval conditions to be wider to perform the second retrieval [Hattori, c. 23 l. 25-39, if the estimated number of retrieval count does not fall between the specific minimum retrieval (lower limit) count and the specified maximum retrieval count (upper limit) the retrieval expression is modified repeatedly until the condition is satisfied.].

#### Claim 10:

The service retrieval apparatuses according to claim 9, wherein the retrieval unit performs the second retrieval with respect to a new retrieval range excluding a range for which the first retrieval is performed [Hattori, c. 23 l. 30-39, retrieval parameter k indicates how restrictive the retrieval condition is. As the value of retrieval k becomes closer to 1, the retrieval condition becomes more restrictive and the number of data items retrieved from database decreases. Conversely, as the value of the retrieval parameter k becomes closer to 0 the retrieval condition becomes less restrictive and the number of data items increases. ].

## **Claim 11:**

The service retrieval apparatuses according to claim 8, wherein, when it is judged that a number of one or more services included in the result of the first retrieval exceeds an upper

conditions to be narrower to perform the second retrieval [Hattori, c. 23 l. 25-39, if the estimated number of retrieval count does not fall between the specific minimum retrieval (lower limit) count and the specified maximum retrieval count (upper limit) the retrieval expression is modified repeatedly until the condition is satisfied.].

# Claim 12:

The service retrieval apparatuses according to claim 11, wherein the retrieval unit performs the second retrieval with respect to a new retrieval range excluding a range for which the first retrieval is performed [Hattori, c. 23 l. 30-39, retrieval parameter k indicates how restrictive the retrieval condition is. As the value of retrieval k becomes closer to 1, the retrieval condition becomes more restrictive and the number of data items retrieved from database decreases. Conversely, as the value of the retrieval parameter k becomes closer to 0 the retrieval condition becomes less restrictive and the number of data items increases. ].

#### Claim 13:

The service retrieval apparatuses according to claim 12, wherein the retrieval unit narrows down a range for which the first retrieval is performed to perform the second retrieval [Hattori, c. 23 l. 25-39, if the estimated number of retrieval count does not fall between the specific minimum retrieval (lower limit) count and the specified maximum retrieval count (upper limit) the retrieval expression is modified repeatedly until the condition is satisfied.]..

6. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5761496 by Hattori (hereafter Hattori) further in view of U.S. Patent Application Publication 2003/0204497 by Kalogeraki et. al. (hereafter Kalogeraki), Background of the Application (hereafter background), and U.S. Patent 6026388 by Liddy et. al. (hereafter Liddy).

# Claim 14:

The service retrieval apparatuses according to claim 8, further comprising a reply unit that rearranges the result of the retrieval based upon values with respect to attribute items included in the retrieval conditions, and then returns the result of the retrieval to said client.

Hattori, Kagogeraki, and the background disclose in Hattori retrieval based upon values with respect to attribute items included in the retrieval condition (Hattori, c. 11 l.39-61), retrieval request has a retrieval request consisting of an attribute, the value of the attribute, and it's importance degree and returning the result of the retrieval to client (Hattori, retrieval result output, col. 10 lines 53-55); however Hattori, Kagogeraki, and the background do not explicitly disclose a reply unit that rearranges the result of the retrieval. On the other hand, Liddy discloses matching of documents to a query organizes documents by matching scores in a ranked list. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hattori, Kagogeraki, and the background to have included the step of a reply unit that rearranges the result of the retrieval based on the disclosure of Liddy. One of

Application/Control Number: 10/627,915 Page 19

Art Unit: 2167

ordinary skill in the art at the time the invention was made would have been motivated to do so for the purpose of displaying the most relevant results first.

# Response to Arguments

7. Applicant's arguments with respect to claim 1-21 have been considered but are moot in view of the new ground(s) of rejection.

As to the assertion Hattori does not disclose judgment criteria set in advance.

In response, the examiner respectfully disagrees with applicant's assertion. Hattori, figure 24, c.

22 1. 42-45, shows an example of retrieval request input processing performed by the retrieval request input section that specifies keyword and importance degrees at the prompt as well as specifying maximum and minimum retrieval counts. Therefore, as applicant's example demonstrates, upper and lower limits are specified before judgment of results occur.

#### Conclusion

8. The prior art made of record listed on PTO-892 and not relied, if any, upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D. Pham whose telephone number is (571)272-3924. The examiner can normally be reached on Monday - Friday 9am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Pham Art Unit 2167 Examiner

11/9/06

Cam Y. Truong Art Unit 2162 Primary Examiner

cy

John Cottingham Art Unit 2167 Supervisor

JOHN COTTINGHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100